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## THE TRANSPORTATION COST IN A BASIC INDUSTRY—STEEL PRODUCTS

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**I**N talking on the subject "Transportation Costs in Steel Products", I do not presume to speak for the Steel Industry. However, the figures which I shall present, although applicable to plants making high-finished sheet steel, are, I believe, indicative of what is true with respect to all other steel products.

In arriving at the quantity of iron ore, coke and limestone used in the production of one ton of pig iron we have used as a basis the amounts shown by the Southern Ohio pig-iron manufacturers in the ore case before the Interstate Commerce Commission.

To make one ton of pig iron, the following quantities of raw material are required:

Iron ore .....	2 gross tons
Coke .....	1.10 net tons
Limestone .....	.50 net tons

The quantity of pig iron used in the production of one net ton of finished sheets is taken from our own detailed cost sheets.

If you will refer to the chart you will observe that we have presented figures showing the accumulated freight in the five principal raw materials in a net ton of finished steel sheets delivered at St. Louis. The city of St. Louis is used only because it is a natural market for a plant in our locality.

This freight today is \$24.07, in 1914 it was \$11.84, showing an increase of \$12.23 today over the period at the beginning of the World War.

If we deduct the freight from Middletown to St. Louis, which is \$6.80, we have \$17.271 as the amount of accumulated freight in these items at Middletown.

Sheets which are being delivered on orders taken prior to



A number of elements in the cost of producing steel show little if any recession from war-time figures, notably that of railroad transportation, which on basis of existing rate conditions averages in the case of the subsidiary companies upwards of forty per cent of the total cost of producing steel.

If we were to add to the figures we have shown on the chart the freight on all the other materials and supplies used to produce a ton of sheet steel, you can readily see that the statement just quoted is certainly conservative as to the facts.

In announcing new and lower prices for steel products, going into effect on July 5, 1921, President Grace, of Bethlehem Steel, said:

The increase in freight rates has been the largest factor in increasing the cost of manufacturing steel products because the making of a ton of finished steel involves the transportation of more than five tons of raw materials. The cost factors next in importance are materials and labor.

Taking as an example the price for structural shapes, under the new schedule of prices, 2 cents a pound or \$44.80 a gross ton, the comparison with pre-war prices, reflecting concretely the three more important cost factors, is as follows:

The increase over pre-war cost in transportation on ore, coal, limestone, scrap and miscellaneous supplies amounts to \$7.85 per ton of finished steel.

The accumulated freight in sheet bars would I believe compare very favorably with the freight in structural shapes, yet sheet bars represent only the beginning of operations in the production of finished sheets, so by a little use of the imagination you can readily see what the total transportation cost in a ton of sheet steel would be, if all the materials used in all the operations were included in our figures.

It may interest you to know for instance, that in 1920 we used:

5555 Net tons spelter  
11335 Net tons sulphuric acid  
26173 Net tons fire brick of all kinds.

As an illustration of the conditions existing in 1914 as compared with today I should like to present the facts with reference to our coal supply.

In 1914 the average price of all the coal we bought was 93c per ton at the mine; the freight was \$1.15, making a total cost of \$2.08 per ton f. o. b. Middletown.

The freight alone today is \$2.24, or 16c more than the freight plus the cost of the coal in 1914.

It is our opinion that transportation costs must be liquidated to somewhere near the same percentage above the base of 1914 as is true with respect to steel prices. To secure liquidation of transportation charges, comparable with that which has already taken place in the steel industry, will require a reduction of approximately 28½% in present rates.

I think I am safe in saying that the steel industry as a whole wants not higher prices but lower costs in order that its surplus production can be sold in the markets of the world in competition with our fellow-manufacturers across the water.

I am not unmindful of the part railroad wages are playing in the cost of transportation and I submit to you that it is not reasonable to ask the steel worker, who is receiving a wage fifty per cent above base, to buy transportation cost in everything he wears and eats when that cost is so largely affected by railroad wages one hundred per cent above base.

Until the restoration of approximately the same relationship which existed between transportation, fuel, the various basic commodities and wages during the pre-war period is effected, a normal exchange of commodities cannot take place and any attempt to maintain one of the factors of cost at a high level in the face of radical declines in the other factors, is contrary to economic law and its depressing effect is cumulative.